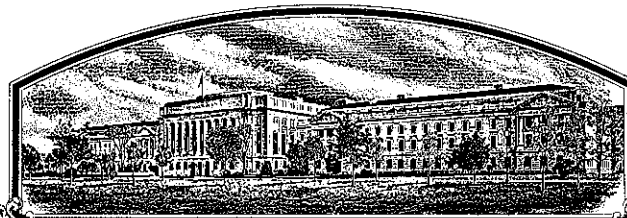


No.

9000072



# THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

## The Ohio State University

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF *eighteen* YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT (U.S.C. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

TOMATO

'Ohio 7983'



In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this 29th day of May in the year of our Lord one thousand nine hundred and ninety-two.

Attest:

*Kenneth H. Evans*  
Commissioner  
Plant Variety Protection Office  
Agricultural Marketing Service

*Edward Madigan*  
Secretary of Agriculture

U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE

FORM APPROVED: OMB NO. 0581-0055

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

## APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

(Instructions on reverse)

1. NAME OF APPLICANT(S) Stanley Z. Berry and The Ohio State University		2. TEMPORARY DESIGNATION 07983	3. VARIETY NAME 'Ohio 7983'
4. ADDRESS (Street and No. or R.F.D. No., City, State, and Zip Code) OSU/OARDC, Wooster, Ohio 44691		5. PHONE (Include area code) 216-263-3812	FOR OFFICIAL USE ONLY VPPO NUMBER 9000072
6. GENUS AND SPECIES NAME Lycopersicon esculentum	7. FAMILY NAME (Botanical) Solanaceae		FILING DATE January 26, 1990 TIME 10:00 <input checked="" type="checkbox"/> A.M. <input type="checkbox"/> P.M.
8. KIND NAME Tomato	9. DATE OF DETERMINATION December 11, 1989		AMOUNT FOR FILING \$ 2,150. <sup>00</sup> DATE January 26, 1990
10. IF THE APPLICANT NAMED IS NOT A "PERSON," GIVE FORM OF ORGANIZATION (Corporation, partnership, association, etc.)			AMOUNT FOR CERTIFICATE \$ 250. <sup>00</sup> DATE Apr. 24, 1992
11. IF INCORPORATED, GIVE STATE OF INCORPORATION Ohio			12. DATE OF INCORPORATION

13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS

Dr. Stanley Z. Berry  
OUS/OARDC  
Wooster, Ohio 44691

PHONE (Include area code): 216-263-3812

14. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED

- a. ☒ Exhibit A, Origin and Breeding History of the Variety (See Section 52 of the Plant Variety Protection Act.)  
b. ☒ Exhibit B, Novelty Statement.  
c. ☒ Exhibit C, Objective Description of Variety (Request form from Plant Variety Protection Office.)  
d. ☒ Exhibit D, Additional Description of Variety.  
e. ☒ Exhibit E, Statement of the Basis of Applicant's Ownership.

15. DOES THE APPLICANT(S) SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED? (See Section 83(a) of the Plant Variety Protection Act.) ☐ Yes (If "Yes," answer items 16 and 17 below) ☒ No

16. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?

☐ Yes ☒ No

17. IF "YES" TO ITEM 16, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED?

☐ Foundation ☐ Registered ☐ Certified

18. DID THE APPLICANT(S) PREVIOUSLY FILE FOR PROTECTION OF THE VARIETY IN THE U.S.?

☐ Yes (If "Yes," give date)☒ No

19. HAS THE VARIETY BEEN RELEASED, OFFERED FOR SALE, OR MARKETING IN THE U.S. OR OTHER COUNTRIES?

Released by Ohio State University for Trial 3-/31/89

☒ Yes (If "Yes," give names of countries and dates)☐ No

20. The applicant(s) declare(s) that a viable sample of basic seeds of this variety will be furnished with the application and will be replenished upon request in accordance with such regulations as may be applicable.

The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) that the variety is distinct, uniform, and stable as required in Section 41, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.

Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

SIGNATURE OF APPLICANT

Stanley Z. Berry

DATE

12/11/89

SIGNATURE OF APPLICANT

DATE

TOMATO

9000072

'Ohio 7983'

Item 14A: Exhibit A: Origin and Breeding History of the Variety

'Ohio 7983' is an F7 (seventh generation) selection developed through a regular pedigree type selection program over a period of 15 years. Its pedigree is as follows:

Ohio 7983 = C37 x [VF 134 x [(UC98 x C28) x (Ohio 2170 x VF Roma)]]

'Ohio 7983' has been judged for stability for more than 3 generations of reproduction and no variants have been observed to occur in it.

9000072

**TOMATO**

**'Ohio 7983'**

**Item 14B: Exhibit B: Novelty Statement**

'Ohio 7983' can best be compared and delineated for novelty with the most similar commercial canning tomato variety 'Ohio 7870'.

'Ohio 7983' is of early-main season variety, while 'Ohio 7870' is of main season maturity. 'Ohio 7983' has a more prostrate spreading vine than 'Ohio 7870', which is more compact and upright. 'Ohio 7983' has a fruit stem which is jointless (j2), while the 'Ohio 7870' fruit stem is jointed (arthritic type).

U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE  
LIVESTOCK, MEAT, GRAIN AND SEED DIVISION  
PLANT VARIETY PROTECTION OFFICE  
BELTSVILLE, MARYLAND 20705

EXHIBIT C  
(Tomato)

OBJECTIVE DESCRIPTION OF VARIETY  
TOMATO (*Lycopersicon esculentum* Mill.)

NAME OF APPLICANT(S) Stanley Z. Berry & Ohio State University	TEMPORARY DESIGNATION 07983	VARIETY NAME 'Ohio 7983'
ADDRESS (Street and No., or R.F.D. No., City, State, and Zip Code) OSU/OARDC, Wooster, Ohio 44691		FOR OFFICIAL USE ONLY PVPO NUMBER 9000072

Choose responses for the following characters which best fit your variety. Complete this form as fully as possible for best characterization of the variety. When a single quantitative value is requested (e.g., fruit weight), your answer should be the mean of an adequate-sized, unbiased sample of plants. Use leading zeroes when necessary (e.g.,   or   , etc.). The applicant variety should be compared with at least one well-known standard check variety of the same type (see list of recommended check varieties below), and grown in the same trials. The characters on this form should be described from plants grown under normal conditions of culture for the variety. Indicate by a check whether trial data are from greenhouse \_\_\_\_\_ or field: ☒ plantings. Trials direct-seeded \_\_\_\_\_ or transplanted ☒; staked \_\_\_\_\_ or unstaked \_\_\_\_\_. Give locations and dates of seeding and transplanting here: Fremont and Wooster, Ohio - Transplanting May 30 of 1987, 1988 and 1989

COMPARISONS SHOULD BE MADE TO ONE OR MORE CHECK VARIETIES IN THE FOLLOWING LIST, IF AT ALL POSSIBLE. ENTER THE NUMBER OF THE CHECK IN BOXES WHERE IDENTITY OF CHECK IS REQUESTED.

1 = Ace 55 VF	7 = Homestead 24	13 = Red Rock	19 = VF 134
2 = Campbell 37	8 = Marglobe	14 = Roma VF	20 = US 28
3 = Chico III	9 = Murietta	15 = Rutgers	21 = VF 145 B 7879
4 = Flora Dade	10 = New Yorker	16 = Sunray	22 = Other (Specify) <u>'Ohio 7870'</u>
5 = Florida MH-1	11 = Ohio MR-13	17 = Tropic	
6 = Heinz 1350	12 = Red Cherry Large	18 = UC 82	

## 1. SEEDLING:

Anthocyanin in hypocotyl of 2-15 cm. seedling: 1 = Absent 2 = Present  Habit of 3-4 week old seedling: 1 = Normal 2 = Compact

## 2. MATURE PLANT (at maximum vegetative development):

Growth: 1 = Indeterminate 2 = Determinate   Cm. Height

Form: 1 = Lax, open 2 = Normal 3 = Compact 4 = Dwarf 5 = Brachytic

Size of canopy (compared to others of similar type): 1 = Small 2 = Medium 3 = Large

Habit: 1 = Sprawling (decumbent) 2 = Semi-erect 3 = Erect ('Dwarf Champion')

## 3. STEM:

Branching: 1 = Sparse ('Brehm's Solid Red', 'Fireball') 2 = Intermediate ('Westover') 3 = Profuse ('UC 82')

Branching at cotyledonary or first leafy node: 1 = Present 2 = Absent

No. of nodes below the first inflorescence: 1 = 1-4 2 = 4-7 3 = 7-10 4 = 10 or more

No. of nodes between early (1st - 2nd, 2nd - 3rd) inflorescences.  No. of nodes between later-developing inflorescences.

Pubescence on younger stems: 1 = Smooth (no long hairs) 2 = Sparsely hairy (scattered long hairs) 3 = Moderately hairy 4 = Densely hairy or wooly

## 4. LEAF (mature leaf beneath the 3rd inflorescence):

Type: 1 = Tomato 2 = Potato ('Trip-L-Crop')  Morphology (choose illustration on pg. 5 of this form that is most similar)

Margins of major leaflets: 1 = Nearly entire 2 = Shallowly toothed or scalloped 3 = Deeply toothed or cut, esp. towards base

Marginal rolling or wiltiness: 1 = Absent 2 = Slight 3 = Moderate 4 = Strong

Onset of leaflet rolling: 1 = Early-season 2 = Mid-season 3 = Late season

## 4. LEAF (mature leaf beneath the 3rd inflorescence -- continued):

- ☐ 2 Surface of major leaflets: 1 = Smooth 2 = Rugose (bumpy or veiny)
- ☐ 2 Pubescence: 1 = Smooth (no long hairs) 2 = Normal 3 = Hirsute 4 = Woolly

## 5. INFLORESCENCE (make observations on 3rd inflorescence):

- ☐ 1 Type: 1 = Simple 2 = Forked (2 major axes) 3 = Compound (much branched)
- ☐ 7 Number of flowers in inflorescence, average
- ☐ 1 Leafy or "running" inflorescences: 1 = Absent 2 = Occasional 3 = Frequent

## 6. FLOWER:

- ☐ 1 Calyx: 1 = Normal, lobes awl-shaped 2 = Macrocalyx, lobes large, leaflike 3 = Fleshy
- ☐ 2 Calyx-lobes: 1 = Shorter than corolla 2 = Approx. equalling corolla 3 = Distinctly longer than corolla
- ☐ 1 Corolla color: 1 = Yellow 2 = Old gold 3 = White or tan
- ☐ 2 Style pubescence: 1 = Absent 2 = Sparse 3 = Dense
- ☐ 1 Anthers: 1 = All fused into tube 2 = Separating into 2 or more groups at anthesis
- ☐ 1 Fasciation (1st flower of 2nd or 3rd inflorescence): 1 = Absent 2 = Occasionally present 3 = Frequently present

## 7. FRUIT (3rd fruit of 2nd or 3rd cluster): For the first 5 characters below, match your variety with the most similar illustration on pg. 5 of this form.

- ☐ 10 Typical fruit shape: ☒ 1 Shape of transverse section: ☒ 1 Shape of stem end: ☒ 1
- ☒ 7 per conv., kete JMB ☐ 2 Shape of blossom end: ☒ 1 Shape of pistil scar: ☒ 1
- AAA 27 Dec 1991

- ☐ 2 Abscission layer: 1 = Present (pedicellate) 2 = Absent (jointless) ☐ 2 Point of detachment of fruit at harvest: 1 = At pedicel joint 2 = At calyx attachment

- ☐ 1 ☐ 2 mm length of pedicel (from joint to calyx attachment)

- ☐ 7 ☐ 5 mm length of mature fruit (stem axis) . . . . . ☐ 8 ☐ 0

- mm length, check var. no. (0410.7870) ☐ 2 ☐ 2

- ☐ 5 ☐ 5 mm diameter of fruit at widest point . . . . . ☐ 6 ☐ 5

- mm diameter, check var. no. (0410.7870) ☐ 2 ☐ 2

- ☐ 6 ☐ 0 g weight of mature fruit . . . . . ☐ 7 ☐ 0

- g weight, check var. no. (0410.7870) ☐ 2 ☐ 2

- ☐ 1 No. of locules: 1 = Two 2 = Three and four 3 = Five or more

- ☐ 2 Fruit surface: 1 = Smooth 2 = Slightly rough 3 = Moderately rough or ribbed

- ☐ 2 Fruit base color (mature-green stage): 1 = Light green ('Lanai', 'VF145-F5') 2 = Light gray-green ('Westover') 3 = Apple or medium green ('Heinz 1439 VF') 4 = Yellow green 5 = Dark green

- ☐ 1 Fruit pattern (mature-green stage): 1 = Uniform green 2 = Green-shouldered 3 = Radial stripes on sides of fruit

- ☐ Shoulder color if different from base: 1 = Dark green 2 = Grey green 3 = Yellow green

- ☐ 5 Fruit color, full-ripe: 1 = White 2 = Yellow 3 = Orange 4 = Pink 5 = Red 6 = Brownish 7 = Greenish 8 = Other (Specify)

- ☐ 3 Flesh color, full-ripe: 1 = Yellow 2 = Pink 3 = Red/Crimson 4 = Orange 5 = Other (Specify)

- ☐ 1 Flesh color: 1 = Uniform 2 = With lighter and darker areas in walls

- ☐ 3 Locular gel color of table-ripe fruit: 1 = Green 2 = Yellow 3 = Red

- ☐ 2 Ripening: 1 = Blossom-to-stem end 2 = Uniform

## 7. FRUIT (3rd fruit of 2nd or 3rd cluster): Continued

<input type="text" value="2"/>	Ripening:	1 = Inside out	2 = Uniformly	3 = Outside in	<input type="text" value="1"/>	Stem scar size:	1 = Small ('Roma')	2 = Medium ('Rutgers')	3 = Large
<input type="text" value="2"/>	Epidermis color:	1 = Colorless	2 = Yellow						
<input type="text" value="1"/>	Epidermis:	1 = Normal	2 = Easy-peel		<input type="text" value="1"/>	Core:	1 = Coreless (absent or smaller than 6x6 mm)	2 = Present	
<input type="text" value="3"/>	Epidermis texture:	1 = Tender	2 = Average	3 = Tough					
<input type="text" value="2"/>	Thickness of pericarp	<input type="text" value="2"/>			Thickness of pericarp, check var. no.	<input type="text" value="2"/>			
		1 = Under 3 mm	2 = 3-6 mm	3 = 6-9 mm		4 = Over 9 mm			

## 8. RESISTANCE TO FRUIT DISORDERS (Use code: 0 = Unknown, 1 = Susceptible, 2 = Resistant)

<input type="text" value="1"/>	Blossom end rot	<input type="text" value="2"/>	Catface	<input type="text" value="2"/>	Fruit pox	<input type="text" value="2"/>	Zippering
<input type="text" value="2"/>	Blotchy ripening	<input type="text" value="2"/>	Cracking, concentric	<input type="text" value="0"/>	Gold fleck	<input type="text" value="1"/>	Other (Specify)
<input type="text" value="2"/>	Bursting	<input type="text" value="2"/>	Cracking, radial	<input type="text" value="2"/>	Graywall		

## 9. DISEASE AND PEST REACTION (Use code: 0 = Not tested, 1 = Susceptible, 2 = Resistant). NOTE: If claim of novelty is based wholly or in substantial part upon disease resistance, trial data should be appended. These should specify the method of testing, the reaction of the application variety, and reaction of well-known check varieties grown in the trial (identified by name).

## VIRAL DISEASES:

<input type="text" value="0"/>	Cucumber mosaic	<input type="text" value="0"/>	Tobacco mosaic, Race 0	<input type="text" value="0"/>	Tobacco mosaic, Race 2 <sup>2</sup>
<input type="text" value="0"/>	Curly top	<input type="text" value="0"/>	Tobacco mosaic, Race 1	<input type="text" value="0"/>	Tomato spotted wilt
<input type="text" value="0"/>	Potato-Y virus	<input type="text" value="0"/>	Tobacco mosaic, Race 2	<input type="text" value="0"/>	Tomato yellows
<input type="text" value="0"/>	Other virus (Specify)				

## BACTERIAL DISEASES:

<input type="text" value="0"/>	Bacterial canker ( <i>Corynebacterium michiganense</i> )	<input type="text" value="0"/>	Bacterial spot ( <i>Xanthomonas vesicatorum</i> )
<input type="text" value="0"/>	Bacterial soft rot ( <i>Erwinia carotovora</i> )	<input type="text" value="0"/>	Bacterial wilt, ( <i>Pseudomonas solanacearum</i> )
<input type="text" value="1"/>	Bacterial speck ( <i>Pseudomonas tomato</i> )	<input type="text" value="0"/>	Other bacterial disease (Specify)

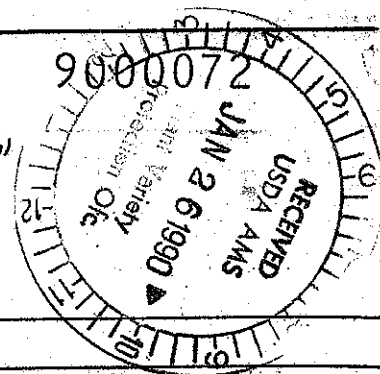
## FUNGAL DISEASES:

<input type="text" value="1"/>	Anthraxnose ( <i>Colletotrichum</i> spp.)	<input type="text" value="0"/>	Leaf mold, Race 1 ( <i>Cladosporium fulvum</i> )
<input type="text" value="0"/>	Brown root rot or corky root, ( <i>Pyrenochaeta lycopersici</i> )	<input type="text" value="0"/>	Leaf mold, Race 2
<input type="text" value="0"/>	Collar rot or stem canker, ( <i>Alternaria solani</i> )	<input type="text" value="0"/>	Leaf mold, Race 3
<input type="text" value="2"/>	Early blight defoliation, ( <i>Alternaria solani</i> )	<input type="text" value="0"/>	Leaf mold, other races (Specify)
<input type="text" value="2"/>	Fusarium wilt, Race 1, ( <i>F. oxysporum f. lycopersici</i> )	<input type="text" value="0"/>	Nailhead spot ( <i>Alternaria tomato</i> )
<input type="text" value="0"/>	Fusarium wilt, Race 2	<input type="text" value="0"/>	Septoria leafspot ( <i>S. lycopersici</i> )
<input type="text" value="0"/>	Fusarium wilt, Race 3	<input type="text" value="0"/>	Target leafspot ( <i>Corynespora cassicola</i> )
<input type="text" value="0"/>	Gray leaf spot ( <i>Stemphylium</i> spp.)	<input type="text" value="2"/>	Verticillium wilt, Race 1 ( <i>V. albo-atrum</i> )
<input type="text" value="0"/>	Late blight, Race 0, ( <i>Phytophthora infestans</i> )	<input type="text" value="0"/>	Verticillium wilt, Race 2
<input type="text" value="0"/>	Late blight, Race 1	<input type="text" value="1"/>	Other fungal disease
		<input type="text" value="1"/>	Other fungal disease

9. DISEASE AND PEST REACTION (Use code: 0 = Not tested, 1 = Susceptible, 2 = Resistant - Continued)

INSECTS AND PESTS:

<input type="checkbox"/> 0	Colorado potato beetle ( <i>Leptinotarsa decemlineata</i> )	<input type="checkbox"/> 0	Tomato hornworm ( <i>Manduca quinquemaculata</i> )
<input type="checkbox"/> 0	Southern root knot nematode ( <i>Meloidogyne incognita</i> )	<input type="checkbox"/> 0	Tomato fruitworm ( <i>Heliothis zea</i> )
<input type="checkbox"/> 0	Spider mites ( <i>Tetranychus</i> spp.)	<input type="checkbox"/> 0	Whitefly ( <i>Trialeurodes vaporariorum</i> )
<input type="checkbox"/> 0	Sugar beet army worm ( <i>Spodoptera exigua</i> )	<input type="checkbox"/> 0	Other (Specify) _____
<input type="checkbox"/> 0	Tobacco flea beetle ( <i>Epitrix hirtipennis</i> )		



POLLUTANTS:

<input type="checkbox"/> 0	Ozone	<input type="checkbox"/> 0	Sulfur dioxide	<input type="checkbox"/> 0	Other (Specify) _____
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10. CHEMISTRY AND COMPOSITION OF FULL-RIPE FRUITS: Suggested test methods may be found in "Tomato Products," 5th ed., National Canners Assn. Bull. 27-L. Please specify test methods or give a reference to methods used. Fill in table below with values for the new variety and for at least one well-known check variety of similar type grown in the same trial. Specify names or numbers of check varieties.

	SUBMITTED VARIETY	Check Variety <u>Ohio 7870</u>	Check Variety <u>Ohio 7814</u>	Check Variety <u>Heinz 722</u>
pH	4.5	4.4	4.3	4.5
Titrate acidity, as % citric	0.19	0.30	0.17	0.19
Total solids (dry matter, seeds and skin removed)	---	---	---	---
Soluble solids, as °Brix	1.3390	1.3400	1.3391	1.3396

11. PHENOLOGY: Express length of developmental stages either as calendar days or as heat units (growing degree days), in degrees Celsius. If heat units are used, indicate the base temperature used in their calculation here \_\_\_\_\_ °C. See paper by Warnock under "References" for method. Give comparative data for at least one check variety; identify checks by name or by number from table on page 1.

	APPLICATION VARIETY	Check variety <u>Ohio 7870</u>	Check variety <u>Ohio 7814</u>	Check variety <u>Heinz 722</u>
Seeding to 50% flower (1 open flower on 50% of plants)	50 days	55 days	50 days	55 days
Seed to once-over harvest (if applicable)	110 days	115 days	110 days	115 days

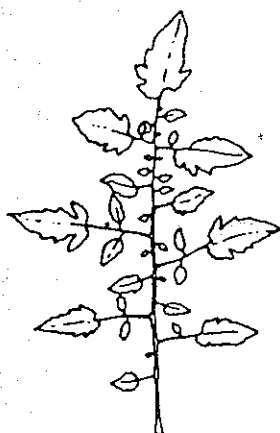
<input type="checkbox"/> 3	Fruiting season:	1 = Long ('Marglobe')	2 = Medium ('Westover')	3 = Short, concentrated ('VF 145')
		4 = Very concentrated ('UC 82')		
<input type="checkbox"/> 4	Relative maturity in areas tested:	1 = Early	2 = Medium early	3 = Medium
		4 = Medium late	5 = Late	6 = Variable (if relative maturity is known to differ by location or environment, please explain on separate sheet).

12. ADAPTATION: If more than one category applies, list all in rank order.

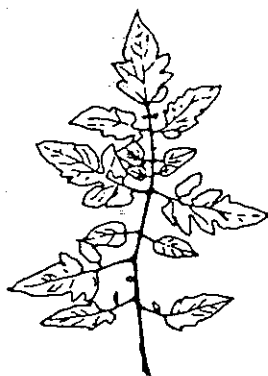
<input type="checkbox"/> 1	Culture:	1 = Field	2 = Greenhouse
<input type="checkbox"/> 3	Principal use(s):	1 = Home garden	2 = Fresh market
		4 = Concentrated products	3 = Whole-pack canning
<input type="checkbox"/> 2	Machine harvest:	1 = Not adapted	2 = Adapted
<input type="checkbox"/> 1	Regions to which adaptation has been demonstrated:	1 = Northeast	3 = Southeast
<input type="checkbox"/> 2		5 = Great Plains	4 = Florida
<input type="checkbox"/> 5		6 = South-central	7 = Intermountain West
		9 = California: Sacramento and Upper San Joaquin Valley	8 = Northwest
		10 = California: Coastal areas	11 = California: Southern San Joaquin Valley & deserts



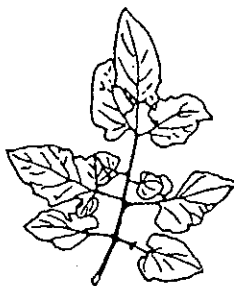
## 4. LEAF: Morphology:



(1)



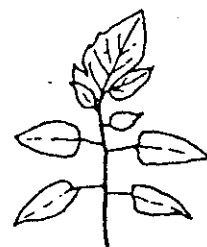
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(4)

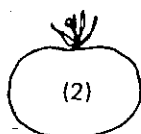


(5)

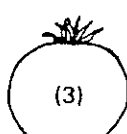
## 7. FRUIT: Typical fruit shape:



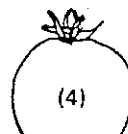
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(2)



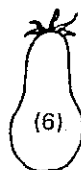
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(4)



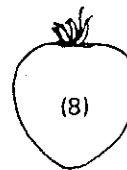
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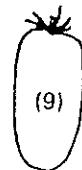
(6)



(7)



(8)

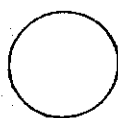


(9)



(10)

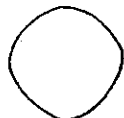
## Shape of transverse section:



1=round



2=flattened



3=angular

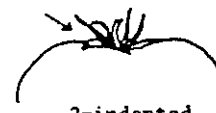


4=irregular

## Shape of stem end:



1=flat



2=indented

## Shape of blossom end:



1=indented



2=flat



3=nipped



4=tapered

## Shape of pistil scar:



1=dot



2=stellate



3=linear



4=irregular

## REFERENCES

- Anonymous, 1976. All About Tomatoes. Ortho Books, Chevron Chemical Co., San Francisco. In three volumes: Midwest/Northeast Edition, West Edition, and South Edition.
- Ware, G.W. & J. P. McCollum, 1968. Producing Vegetable Crops. The Interstate Printer & Publishers, Inc., Danville, Illinois. Chapter 30, pp. 451-473, "Tomatoes".
- Warnock, S.J. 1978. Using Tomato Heat Units. Leaflet No. 6, Campbell Institute for Agricultural Research, Camden, NJ. 10 p.
- Webb, R.E., T. H. Barksdale, & A. K. Stoner, 1973, "Tomatoes", pp. 344-361, In: Nelson, R.R. (Ed.), Breeding Plants for Disease Resistance. Pennsylvania State University Press, University Park.
- Young, P.A. & J.W. MacArthur, 1947. Horticultural characters of tomatoes. Bull. Texas Agric. Exper. Station No. 698.

**TOMATO**

9000072

**'Ohio 7983'**

**Item 14D: Exhibit D. Additional Description of Variety**

'Ohio 7983' has been extensively evaluated in The Ohio State University and midwest grower-processor trials. It has exhibited excellent productivity and processed quality attributes in whole canned and pureed product. It has fruiting characteristics which allow uniform fruit set, allowing for good concentration of ripe, fruit for once-over harvest. 'Ohio 7983' fruit firmness, resistance to radial and concentric fruit cracking and ability of fruit to store on the vine for extended periods allows its harvest by machine.

TOMATO

9000072

'Ohio 7983'

**Exhibit 14E. Statement of Basis of Applicant's Ownership**

All research and development work of 'Ohio 7983' was carried out at The Ohio State University.

The breeding and development of 'Ohio 7983' was carried out and under the supervision of Dr. S.Z. Berry, Professor, the entire period of the variety's development.